REMARKS

Reconsideration is respectfully requested.

Claims 1- 34 are present. The Examiner has objected to the claims stating there is no claim 7. Applicant submits herewith a complete set of claims renumbering claims 8-32 to be claims 7-31. New claims 32- 34 have been added.

Claims 1-31 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yoshio et al. (JP-06-316442) in view of Ota et al. (U.S. Patent No. 5,925,438) and Nagatsuka (U.S. Patent No. 5,993,898).

Applicants respectfully traverse. The Examiner has apparently simply located elements in three references alleging it would be obvious to modify "the multi layer anti-reflection films of Yoshio with the features of two layers with different refractive indexes in between a conductive layer and a transparent substrate as taught by Ota and a transparent substrate such as glass a taught by Nakatsuka. However, all the limitations of the claims can not be found even if the documents relied on are all looked at together. First, there is no teaching in any of the references to design a transparent baseboard with conductive multi-layer antireflective films on a transparent substrate in which the refractive index of the multi-layers films have any specific relationship to the refractive index of the substrate. Second, even if one were to combine

elements of all the documents (using hindsight) to construct a relationship as claimed by applicants, the values would be different.

As the Examiner points out, "Yoshio does not disclose two refractive layers between the transparent conductive film and the transparent substrate. Also Yoshio does not specifically disclose … the refractive index of each of the multi-layer[s]". Ota makes no suggestion to stack multiple layers on a substrate in which the refractive indexes in the layers above the substrate have any given relationship to the refractive index of the substrate. In fact, as the Examiner points out, "Ota fails to mention the refractive index of the substrate." Instead Ota teaches using a low refractive index layer comprising a SiO_2 gel and using a hard coat layer having ultra-fine particles which can be heat treated at a temperature lower than the deflection temp of a substrate.

The applicants do not understand the Examiner's comment "Ota further discloses the optical thickness of the film is determined considering the refractive index of the layer (col. 6, lines 4-13)." Column 6 lines 4-13 refer to adjusting the refractive index of the low refractive layer comprising a gel film to 1.42 or less by including granules of 30 to 60 nm making the refractive index less than that of an ordinary SiO_2 deposited film. Applicants assume the Examiner is referring to the claim limitation "…optical thickness is determined considering the

refractive index of said substrate." Applicants respectfully do not see the connection between the Ota citation and claim wording. The claim limitation is clearly not met.

The Examiner states, "Nagatsuka is cited to teach multi-layer antireflection films similar to both Yoshio and Ota [and that] Nakatsuka further discloses that the refractive index of the transparent substrate such as glass is 1.62 (col. 4, line 24)". Nagatsuka teaches a fabrication method and structure for optical anti-refection coatings and multilayer optical antireflection coatings wherein some layers are formed by dry coating and some layers are formed by a wet coating. Nagatsuka teaches specific examples of refractive index values of the layers in the disclosed structure. In column 4 lines 15-32 Nagatsuka suggests a first layer, 16 in Fig. 1, of refractive index 1.45, a second layer 20 of refractive index 1.22, on a substrate 12 of refractive index 1.62. Nagatsuka's suggestions illustrate a number of things regarding the prior art teaching. First the refractive index of the substrate is taught only as an example of how the anti-reflection layer structure can be applied onto optical glass i.e. "conventional glasses for cameras" (col.4 line 25). There is no suggestion to select materials in the layer structure that have refractive indexes with any specific relationship to the refractive index of the substrate. Second, Nakatsuka's suggest using first and second layers of refractive index 1.45 and 1.22 respectively. Each being lower than the

refractive index of the substrate of 1.62 is different than applicants' claimed structure. In claim 1 applicants recite:

> *"wherein the first layer has refractive index between 1.50 and 2.50 that is higher than said substrate, and the second-films layer films has index between 1.35 and 1.60 that is lower than said substrate";*

and in claim 13 applicants recite;

> *"in which the first-layer transparent thin film has refraction index between 1.50 and 2.50 that is higher than said selected transparent fix substrate and/or flexible transparent substrate, and the second-layer transparent thin film with refraction index between 1.35 and 1.60 that is lower than said selected transparent fix substrate or flexible transparent substrate"*

So even if a specific relationship was suggested by Nagatsuka (but none is), it would be a different relationship than that claimed by applicants. Clearly not all the limitations as claimed by applicant can be found in the references cited whether considered alone or when combined. Reconsideration of independent claims 1 and 13 (originally numbered 14) and all the claims which depend therefrom is respectfully requested.

The invention disclosed in the document (JP-06-318442) by Goto Yoshio et al is that the optical film thickness of the first layer is $\lambda/4$ and the sum optical film thickness of the second layer and the third layer (conductive film layer) is $\lambda/4$ as mentioned in the background of the present specification. The thickness of the second layer is determined inevitably

because the thickness of the outmost conductive layer is determined in order to obtain the desired surface resistance. In the present invention, it is possible to make more preferable film construction because the thickness of other film layers can be changed flexibly indifferent to the thickness of the third layer.

Also, the Examiner states "Ota further discloses the optical thickness of the film is determined considering the refractive index of the layer (col. 6, lines 4-13)." Even if it is true, in the relation with the invention disclosed in the document of JP6-318442 by Goto Yoshio et al, it may be only regarded in order to set that the optical film thickness of the first layer is $\lambda/4$ and the sum optical film thickness of the second layer and the third layer (conductive film layer) is $\lambda/4$. It does not teach or suggest that the optical thickness of each film layer can be changed flexibly as in the present invention.

New claims 32-34 presented are method claims which further highlight applicants' invention. Support for the claims can be found in the specification beginning page 5, line 21. The claims are believed to be in condition for allowance. Allowance is respectfully requested.

The applicants acknowledge the Examiner has made of record, but not relied upon the following U.S. Patents 4,581,280; 4,710,433; 6,329,044; 6,337,771; 6,352,761; 6,590,622; 6,629,833; 6,657,271; 6,727,566; and publications 2002/0197824;

2004/0017363. The applicants believe the claims avoid these cited documents.

In light of the above noted amendments and remarks, this application is believed in condition for allowance and notice thereof is respectfully solicited. The Examiner is asked to contact applicant's attorney at 503-224-0115 if there are any questions.

Respectfully submitted,

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